SMX 3093.6 (2001-006R+

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Gerrit Klaerner et al.

Art Unit 1645

Serial No.: 10/043,394 Filed: January 10, 2002 Confirmation No.: 4664

For: POLYMER BRUSHES FOR IMMOBILIZING MOLECULES TO A SURFACE OR SUBSTRATE HAVING IMPROVED STABILITY

Attention: Office of Licensing and Review

June 12, 2002

## **REQUEST FOR RECONSIDERATION**

TO THE COMMISSIONER OF PATENTS AND TRADEMARKS, SIR:

In response to the Notice dated April 29, 2002 from the Patent and Trademark Office in the above-entitled application, Applicants respectfully request reconsideration of the determination that the subject matter of this application is "useful in the production or utilization of special nuclear materials or atomic energy."

As noted in the present application (see, e.g., page 1, lines 9-24 and the Abstract), the invention is directed to a <u>polymer brush</u> which is particularly <u>well suited</u> for use as a sensor, wherein probes for biological molecules are attached to water-soluble or water-dispersible segments of polymer chains attached to a substrate surface. Sensors of this type are used, for example, <u>to analyze aqueous samples that contain biological material</u>, in order to determine the presence and concentration of bio-molecules in a biological sample. The present invention is further directed to methods of synthesizing such sensors.

Accordingly, the present invention is within the same field as, for example, U.S. Patent Numbers:

5,424,186 (Fodor et al.); 5,436

5,436,327 (Southern et al.);

5,445,934 (Fodor et al.);

5,624,711 (Sundberg et al.);

5,744,305 (Fodor et al.):

5,837,832 (Chee et al.);

-,--,,002 (01100

SMX 3093.6 (2001-006R1) PATENT

5,919,523 (Sundberg et al.); 5,919,626 (Shi et al.); 6,004,755 (Wang); 6,027,880 (Cronin et al.); 6,045,996 (Cronin et al.); 6,054,270 (Southern); 6,057,100 (Heyneker); and, 6,087,102 (Chenchik et al.).

In view of the foregoing, it is clear that the present invention is directed to a tool (e.g., a sensor) for analyzing samples for a material of interest (e.g., a biomolecule), as well as to methods for preparing such a tool. Furthermore, much like the above-noted U.S. patents, the present invention clearly falls within a field that is unrelated to the production or utilization of nuclear materials or atomic energy.

Applicants therefore respectfully request reconsideration of the determination made by the Patent and Trademark Office in this instance.

Respectfully submitted,

Derick E. Allen, Reg. No. 43,468 SENNIGER, POWERS, LEAVITT & ROEDEL

One Metropolitan Square, 16th Floor

nik E. allen

St. Louis, Missouri 63102 (314) 231-5400

## Law Offices of

## SENNIGER, POWERS, LEAVITY AND ROEDEL

One Metropolitan Square, 16th Floor St. Louis, Missouri 63102

Telephone (314) 231-5400 Facsimile (314) 231-4342

FACSIMILE TRANSMITTAL COVER SHEET SING 2002 DATE: 6/12/02 PTO FACSIMILE NUMBER: (703) 305-6384 PLEASE DELIVER THIS FACSIMILE TO: Ms. Crystal D. Jeter THIS FACSIMILE IS BEING SENT BY: Derick E. Allen NUMBER OF PAGES: 3 INCLUDING COVER SHEET TIME SENT: 2:15 DM OPERATOR'S NAME Darlene Pearman CERTIFICATION OF FACSIMILE TRANSMISSION I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below. <u>Darlene Pearman</u> Typed or printed name of person signing certification Tearman) Signature Type of paper transmitted: Request for Reconsideration Applicant's Name: Gerrit Klaerner et al. Serial No.: 10/043,394 Examiner: Licensing & Review Filing Date: January 10, 2002 \_\_ Art Unit: \_\_1645 Application Title: Polymer Brushes for Immobilizing Molecules To a Surface or Substrate Having Improved Stability IF YOU DO NOT RECEIVE ALL PAGES CLEARLY, CALL BACK AS SOON AS

POSSIBLE. CONFIRMING NUMBER IS (314) 231-5400.

GRP220

RECEPTION OK

TX/RX NO.

06/12/02

13:25

1789

CONNECTION TEL

.27033056384

3142314342

CONNECTION ID

START TIME

06/12 13:23

USAGE TIME

00'57

PAGES

3

RESULT

OK